REMARKS

Claims 1-26 are pending in the application, with Claims 1, 6, 11, 16, and 21 being independent. In this Amendment, Claims 1-26 have been amended.

In view of the amendments above and the remarks below, Applicant respectfully requests reconsideration and allowance of the present application.

Applicant is submitting concurrently herewith a Substitute Specification presenting amendments to the specification addressing minor informalities noted therein. No new matter has been added.

Applicant notes with appreciation, the Examiner's consideration of the documents cited in the Information Disclosure Statements filed February 18, 2004, and April 2, 2004. In reviewing the PTO-1449 Forms returned with the last Office Action, Applicant notes that the articles cited on the PTO-1449 Form submitted with the April 2, 2004 Information Disclosure Statement were not initialed. If this was an oversight, Applicant respectfully requests the Examiner to initial beside those articles, and return a copy of the PTO-1449 Form with the next Office communication. If the Examiner has not considered these documents, Applicant respectfully requests the Examiner to explain her reasoning for not doing so in the next communication. For the Examiner's convenience, a copy of the PTO-1449 Form, as partially initialed by the Examiner, is enclosed herewith.

Applicant also notes with appreciation the Examiner's indication that in the Office Action mailed December 15, 2004, that dependent Claims 2-4, 7-9, 12-14, 17-19, and 22-24 would be allowable if rewritten in independent form. Applicant has not rewritten these claims in independent form at this time because Applicant believes that the independent claims from which they depend, at least as amended, are in condition for allowance, as discussed below.

In the last Office Action, Claims 1, 5, 6, 10, 11, 15, 16, 20, 21, 25, and 26 were rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,483,939 (Ochi).

Without conceding the propriety of the rejection, and to advance prosecution, Applicant has amended each of the independent claims to even more clearly recite their patentable features. At least as amended, Applicant submits that Claims 1, 6, 11, 16, and 21 are patentably distinguishable from Ochi.

Specifically, independent Claim 1 relates to a data processing system. The system includes data accumulating means, coordinate system setting means, detecting means, position specifying means, area selecting means, and storing means. The data accumulating means accumulates virtual space data as a set of 3-dimensional data specifying shape. The coordinate system setting means sets a virtual reference point and virtual coordinate axes in the virtual space. The detecting means detects a relative position and a gradient of the coordinate system setting means against a reference position in a real space. The position specifying means specifies virtual positions in the virtual space in accordance with the position data detected by the detecting means. The area selecting means selects a desired area in the virtual space in accordance with the virtual positions specified by the position specifying means. The storing means stores an image of the desired area selected by the selecting means.

Independent Claim 6 relates to a printer. The printer includes data accumulating means, coordinate system setting means, and detecting means, all as recited in independent Claim 1. In addition, the printer of Claim 6 includes printing means to print a desired area in the virtual space specified by the position data detected by the detecting means specified by the virtual reference point and coordinate axis.

Independent Claim 11 relates to an image recording system. The system of Claim 11 includes data accumulating means, coordinate system setting means, detecting means, position specifying means, and area selecting means, all as recited in independent Claim 1. In addition, the image recording system of Claim 11 includes printing means to print the selected desired area in the virtual space.

Independent Claim 16 relates to an image recording method. The steps performed by the method of Claim 16 accomplish functions parallel to those recited for the means of Claim 11.

Independent Claim 21 relates to a data processing system. The a data processing system of Claim 21 includes data accumulating means and a coordinate system setting means, as recited in independent Claim 1. In addition, the system of Claim 21 includes virtual position detecting means to detect a relative position and a gradient of the coordinate system setting means against the virtual reference point. The system of Claim 21 also includes moving means, area selecting means, and storing means. The moving means moves in the virtual space. The area selecting means selects a desired area in the virtual space in accordance with changed values caused by the moving action of the moving means detected by the virtual position detecting means. The storing means store an image of the desired area selected by the area selecting means.

Thus, each of independent Claims 1, 6, 11, and 16 have been amended to recite detecting a relative position and a gradient of the coordinate system setting means against a reference position in a real space. Independent Claim 21 has been amended to recite that a virtual position detecting means detects a relative position and a gradient of the coordinate system setting means against the virtual reference point. As can be understood from the description of the claimed features in the specification at least at page 9 of the original specification, which describes detecting means 4 detecting a relative position and a status (gradient) of the selecting means 3 against a reference position. As described at page 10 of the original specification, to detect the posture and the position of the selecting means 3, detecting means 4 is arranged to measure a distance X between the reference point O and the point o, an angle Y formed by the virtual reference half line L and half line T, and a self-rotating angle Z around the virtual half line L.

Regarding Claim 21, and as described in the original specification at pages 23-24 in the discussion of the fifth embodiment, a data processing system includes virtual position detecting means includes the functions of detecting means 4 as shown in Figure 1, and also includes detecting a position value of the selecting means against the reference position to the relative position value of roller skates 20.

Applicant submits that <u>Ochi</u> does not teach or suggest the features of Applicant's invention recited in the independent claims. In particular, <u>Ochi</u> is directed to a picture processing apparatus. However, in Applicant's understanding, <u>Ochi</u> does not teach or suggest detecting a relative position and a gradient of the coordinate system setting means against a reference position in a real space, as recited in independent Claims 1, 6, and 11, and detecting a relative position and a gradient of the coordinate system against a reference position in a real space, as recited for the method of Claim 16. Similarly, Applicant submits that <u>Ochi</u> does not teach or suggest detecting a relative position and a gradient of the coordinate system setting means against the virtual reference point set by the coordinate system setting means, as recited for the data processing system of Claim 21. Accordingly, Applicant submits that the independent claims are patentably distinguishable from <u>Ochi</u>.

In addition, Applicant submits that the dependent claims are patentably distinguishable from the cited art for at least the reasons discussed above for their base claims. Applicant further submits that the dependent claims recite additional features further distinguishing them from the cited art, and respectfully requests individual consideration of each dependent claim.

In view of the foregoing, Applicant submits that the application is in condition for allowance. Favorable reconsideration and early passage to issue are respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C., office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address below.

Respectfully submitted,

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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)									
	"Haptic Walkthrough Simulator: Its Design and Application to Studies on Cognitive Map", Hiroo Iwata, et al. (July 1992), pages 185 to 192.								
.,		"Virtual Perambulator: A Novel Interface Device for Locomotion in Virtual Environment", Hiroo Iwata, et al. (April 1996), pages 60 to 65.							
		European Search Report dated March 1, 2004 (Ref. No. 2749830).							
EXAMINER DATE CONSIDERED 12 6 04									

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet <u>1</u> of <u>1</u>

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